**Programming Assignment 1**

**Implementation of the Longest Common Subsequence Algorithm**

**Due date: November 2, 2019**

For this assignment you will implement the "Longest Common Subsequence" (LCS) algorithm as described in section 15.4 of the textbook using dynamic programming. Please, read section 15.4 of the book so that you can understand the LCS problem and the concepts of a "common subsequence" and a "longest common subsequence".

You can implement your algorithm in the following programming languages:

* python
* Java

- For your input, please read the input sequences from an input text file.

- Sequence A will be the first line of the text file and sequence B the second line of the text file.

- The name of the input file will be a parameter to your program.

- The output of your program should consider the following:

    - Please print the longest common subsequence along with the length of the string.

**Important Note: Do this assignment by yourself -- individually--, do not use code found in internet.**

**Submission**: Submit your .py or .java code along with a short report of your code. In the report, explain your pseudocode briefly, running time of your algorithm. Also include your python version and java version in the report. Include any special package/library you installed and describe how you run the program in your computer.